

ISSUES ON THE IMPLEMENTATION OF CULTURE-BASED TEACHING STRATEGY¹

(Paulina Pannen, Jamaludin & Yumiati, Universitas Terbuka, Indonesia²)

Abstract

The policy on educational autonomy in Indonesia has provided each school with full authority in managing its own educational discourse. The implementation of school-based management system further demands each school to be competent and creative in designing, implementing, evaluating, and also managing meaningful learning activities within its own school, based on the national guidelines. Culture-based teaching strategy is intended to bridge the gap between schools and the local community where the school resides. In culture-based teaching, the school's subjects are infused with the local culture. The local culture is intensively explored as instructional media, as context of application of the subject matter, and as a frame of mind for learning the subject matter. It empowers the schools with rich selection of local and unique learning resources for meaningful and creative learning experiences. In the upsurge of globalization, the implementation of culture-based teaching strategy gives a way for school to work on preserving the foundation of Indonesian culture while balancing the global and the local issues.

The culture-based teaching strategy provides the teacher with an expanded repertoire of action and activities to introduce subject matter. By exercising their imaginations through subject matter-related cultural work, students as well as teachers are more likely to make new connections and transcend previous limitations. In addition, the culture-based teaching strategy has been seen as powerful strategy to motivate students to apply their knowledge, work cooperatively, and make connections across content areas. Further, the implementation of culture-based teaching strategy has made easier for students to learn the subjects, and the activities has been regarded creative, enjoyable, and meaningful experience of learning.

This paper discusses results of the try-out of the culture-based teaching strategy in one elementary school in Jakarta. The discussion focuses especially on the problems faced by teachers during the try-out process. It was found that there are five major factors to be considered, i.e., the content selection and integration (including knowledge on the subject matter as well as on the local culture), the knowledge construction process, the prejudice reduction process, the equity pedagogy, and the changing school culture. Those factors are to be taken care of for future successful implementation of the culture-based teaching strategy as one powerful alternative that connects the schools with the rich local learning resources.

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² Paulina Pannen, Jamaludin, and Yumiati are faculty members of the Faculty of Education, Universitas Terbuka, Jakarta, Indonesia.

INTRODUCTION

The policy on educational autonomy in Indonesia has provided each school with full authority in managing its own educational discourse. The implementation of school-based management system further demands each school to be competent and creative in designing, implementing, evaluating, and also managing meaningful learning activities within its own school, based on the national guidelines.

The transition from the old policy to the new school autonomy has relatively not been smooth. Teachers and schools have been accustomed to the national curriculum which has to be implemented fully by them. The national curriculum usually comes with structure and coverage of curriculum, essential topics, syllabus, and also lesson plans of each course. Thus, teachers and schools have just to follow the given curriculum. The case was worsened during the implementation of 1994 national curriculum, which was considered overloaded with subject matter area to cover within a given period. Such a situation has driven teachers to be on the target of completing the curriculum, thus leaves no time and space to be creative in designing and delivering their teaching and learning process. The school-based management was introduced along with the competency-based curriculum. The competency-based curriculum, which is developed at the national level, does not provide a full self-contained curriculum anymore, instead it only gives direction as to the competences for each level of schooling. Teachers and schools have the freedom to explore, expand, and developed their own teaching and learning process to achieve the given competences.

Although national guidelines in the form of the competency-based curriculum has been provided, teachers and schools are expected to prepare all the components required for quality education process. This means that school has to generate its own curriculum based on the national guidelines. No more distributed uniform packages of textbooks, thus schools and teachers have to decide on the books and learning materials for the education process. No more centralized examination, which means that school and teachers need to develop their own test items and examination system to evaluate the students learning. The situation has been problematic for teachers and schools. Teachers are not well-trained, thus they lack of design, development, as well as evaluation skills. Many schools are not ready with the new management style,

where they have to be competitive to each other, to involve community, and also to manage their own school.

Culture-based teaching strategy is perceived to be one alternative which can be taken into consideration by schools and teachers in order for them to contextualized their teaching and learning process within the given cultural community. The strategy, emphasizing on the big picture of competences, meaningful learning through the integration of local culture available in the community, is considered effective for increasing the teachers' and students' involvement in studying their local community based on the scientific principles imposed through the subject matters. This strategy calls for teachers' competences and creativity in designing, implementing, evaluating, and also managing meaningful learning activities within the school and its cultural community, based on the national guidelines. It is thus very supportive to the new paradigm of schooling and teaching.

This paper discusses on results of the try-out of the culture-based teaching strategy in one elementary school in Jakarta. The discussion focuses especially on the problems faced by teachers during the try-out process. It was found that there are three major factors to be considered, i.e., the content selection and integration (including knowledge on the subject matter as well as on the local culture), the knowledge construction process, and the changing school culture. Those factors are to be taken care of for future successful implementation of the culture-based teaching strategy as one powerful alternative that connects the schools with the rich local learning resources.

CULTURE-BASED TEACHING STRATEGY

Culture-based teaching strategy is a strategy for teaching content through the integration of culture. The underlying principle of the strategy is a constructivist classroom, where learning is a fun and enjoyable meaning making process. According to Gardner, Brooks and Brooks (1993) and Vigotsky's work on constructivism, contextualizing subject matter into local needs, problems, and context, will help students to construct better scheme of knowledge than loose decontextualized subject matter. Shepard (2002) also claims that new learning is shaped by prior knowledge and cultural perspectives. Therefore, the integration of the local culture into the teaching learning process is necessary to address learning from

local cultural and surroundings, and the application of subject matters to local problems and needs within the students' cultural community. It is a creative strategy to create fun and interest in learning of subject matters, and also to achieve better learning results.

The strategy is intended to bridge the gap between schools and the local community where the school resides. In culture-based teaching, the school's subjects are infused with the local culture, which is intensively explored as instructional media, as context of application of the subject matter, and as a frame of mind for learning the subject matter. Therefore, subject matter are learned contextually to the students daily life and cultural communities. The strategy empowers the schools with rich selection of local and unique learning resources for meaningful and creative learning experiences. In the upsurge of globalization, the implementation of culture-based teaching strategy gives a way for school to work on preserving the foundation of Indonesian culture while balancing the global and the local issues. Goldberg (2001) asserts that local culture and arts are powerful tools for motivating students to apply their knowledge, work cooperatively, and make connections across content areas, and the integration can become a natural tool for everyday learning. Students can learn with culture and arts – that is when culture and arts play the role of instructional media and context of learning, and also students can learn through culture and arts – that is when students can express their understanding and achievement in subject matter area through the form arts (multiple representation) as one expression of culture (adapted from Goldberg, 2001).

The culture-based teaching strategy believes that learning is very closely connected to one's culture, and the availability of the local culture provides the teacher with an expanded repertoire of action and activities to introduce subject matter. This view implies, according to Barret (2002), that teachers should consider using culture-based methodologies in the classroom. By exercising their imaginations through subject matter-related cultural work, students as well as teachers are more likely to make new connections and transcend previous limitations. In addition, the culture-based teaching strategy has been seen as powerful strategy to motivate students to apply their knowledge, work cooperatively, and make connections across content areas. Further, the implementation of culture-based teaching strategy has made easier for students to learn the subjects, and the activities has been regarded creative, enjoyable, and meaningful experience of learning.

Culture and arts in the culture-based teaching strategy include songs, folktales, handicraft, statue, painting, poem, cultural preservation places, dances, traditional costumes and accessories, tools. The coverage of culture and arts, for the purpose of this study is expanded to also include the local material (flora, fauna, places, etc.) that are locally available and meaningful to the people's life (it has meaning to their lives).

Within the culture-based teaching strategy, teaching and learning with culture and arts is where culture serves as tools and objects for learning – a context where learning occurs, a starting point to construct new knowledge, an instructional media to enhance and make learning enjoyable, fun, and creative, examples of application of scientific principles, and a framework of thinking based on scientific inquiry (to be developed further and applied to the development of one's sociocultural community), for various types of knowledge acquisition and skills development to achieve the given competences. While teaching and learning through culture and arts is where culture and arts serve as multiple representations or forms of expression of understanding on scientific principles of subject matters. Learning through arts and culture allows the students to express their understanding in the form of arts or other cultural expression, e.g. a poem, a drawing, a story, a poster, a dance, a statue of clay, a model, etc.

Culture-based teaching strategy is aimed at improving the quality of instruction. In implementing the strategy, teachers are challenged to make a difference in their instruction and learning through creative integration of culture into their instruction. In being creative, teachers are challenged to make a difference in their teaching and learning process through creative integration of the local culture into the teaching of subject matter. This creative teaching differs from what can be seen in school at present, where teaching and learning process is viewed merely as transmitting content for the students to memorize. .

PREVIOUS STUDIES

The infusion of culture and arts across curriculum has been widely studied. The works of the Artsvision (Eisner, 1994; Upitis, 1997) have resulted in a compelling recommendation to use culture and arts not only as a discipline, but also as a means of teaching across the curriculum. Much have also been written about the value of culture and arts as tools for teaching and learning of many skills and concepts beyond the arts themselves, which enable students to apply their knowledge,

work cooperatively, and make connections across content areas. (Elster, 2001; Grauer, et al., 2001).

In the Philippines, Rapanut, et al., (1996) employed the ethno mathematics model to study the indigenous mathematical concepts operating in various aspects of Kankana-ey culture in Mountain Province, specifically weaving patterns, gong music, and kinship system. The study resulted in four lesson plans of mathematics for first year high-school. Other efforts were also taken by NISMED through its publications which infuse culture of the Philippines into science and mathematics education in the Philippines, i.e., *Philippine Folk Science (Katutubong Agham ng Pilipinas)*, *Paper Folding: Art and Mathematics*, *Science and Mathematics Stories*, *Science and Mathematics of Toys* (NISMED, 2001).

In Indonesia, in 1999, Universitas Negeri Semarang introduced the so-called society, education, and technology (SETS) – an approach that takes community and society into consideration for teaching of subject matter, especially science and technology. Later, Pekerti (2000) introduced the teaching of mathematics through music in elementary schools, and Riyanto (2002) also introduced the local games in several areas of Indonesia for learning mathematics. Another effort includes the introduction of chemistry teaching through cooking (Karyadi, 1999).

THE STUDY

The culture-based teaching strategy was pilot tested in SD Dharma Karya, a private elementary school in Jakarta. The phases of the pilot test included introductory seminar, workshop, review and revision, implementation (try-out), and survey. The pilot test was conducted from January to May 2003 for the first cohort, and August to November 2003 for the second cohort. The respondents were 16 teachers and their students in their respective classrooms, 8 teachers of each cohort. Respondents were selected based on the voluntary basis, out of the 33 teachers participated in the introductory seminar.

Data were collected using a questionnaire of 12 items, after the pilot test for the first cohort and before the pilot test for the second cohort. The coverage of the questionnaire include the teachers' initial perception on the culture-based teaching strategy, motivation to participate in the pilot test, perceived difficulties when carrying out the lesson planning, the pilot test, and the evaluation, perceived changes

of learning environment, perceived factors of success, perceived usefulness of the strategy.

Especially for this study, the data were then analyzed using qualitative analysis technique for qualitative data focusing on the issues – constraints and factors of success – in implementing the culture-based teaching strategy. The analysis was based on the framework of Grant & Gomez (2001), which includes issues on:

- a. the content selection and integration (including knowledge on the subject matter as well as on the local culture, and creativity to mix and match the content and the local culture)
- b. the knowledge construction process (transmission process versus meaning-making process)
- c. the prejudice reduction process (accommodating to multicultural background without superimposing one's own culture)
- d. the equity pedagogy (equal opportunity and treatment for education and learning regardless their cultural background).
- e. the changing school culture (learning environment, learning resources, administrative support)

ISSUES IN IMPLEMENTING THE CULTURE-BASED TEACHING STRATEGY

The results of the pilot test indicate that although the culture-based teaching strategy was perceived positive by both students and teachers, teachers were facing some challenges in implementing the culture-based teaching strategy. Out of 5 issues on Grant and Gomez's framework, only three issues are reported by teachers, i.e., issues on:

- a. the content selection and integration (including knowledge on the subject matter as well as on the local culture, and creativity to mix and match the content and the local culture)
- b. the knowledge construction process (transmission process versus meaning-making process)
- c. the changing school culture (learning environment, learning resources, administrative support)

- a. *the content selection and integration (including knowledge on the subject matter as well as on the local culture, and creativity to mix and match the content and the local culture)*

Thorough mastery upon subject matter is a must for teachers to be able to implement culture-based teaching strategy. Mastery of subject matter provides a capability for teachers to select which content needs to be taught for a given competence, and which learning experience should be given for specific content, and thus to match the content with the culture based teaching strategy that can be applied.

In addition, mastery upon various culture is also a must. Sometimes, being cosmopolites, teachers do not fine tune with their own culture in their community. Further, dealing with multicultural students, teachers must be knowledgeable about each students specific cultures. *Lack of knowledge about various culture* had been reported by a number of teachers to be one hindering factor for teachers to be able to implement the culture-based teaching strategy.

Mastery upon subject matter as well as upon various culture, teachers ability and creativity to match the content and the culture-based teaching strategies are constraints which have to be faced by teachers. It is a fact, that teachers nowadays relatively do not possess high level of mastery of subject matter, especially those who have not been involved in any professional development activities. Mastery upon various culture – local as well as multicultural – has also been low among teachers. When they were prepared to be teachers, they were taught in relatively decontextualized manner, so that they are not train to fine tune, even with their own culture. Within such a situation, the ability and creativity to mix and match content with the culture-based strategy thus cannot be expected.

The creativity and ability to mix and match content with specific culture and arts in the culture-based teaching strategy had been the highest factor reported to be hindering the success of implementation of the culture-based teaching strategy. The teachers specifically stated: *it has been confusing, culture-based teaching strategy is definitely not for all materials in teaching and learning process, I don't know much about which arts or culture match my topic, integrating culture and arts to my topic is very difficult, culture as media or as subject for learning?, examples and assistance from facilitators are needed.*

Nevertheless, *personal motivation of teachers to learn the new strategy, curiosity, eagerness to widen the horizon, finding out new strategies for teaching*

were among factors reported by teachers to support the success of implementation of the culture-based learning strategy. Another important factor was the availability of facilitators who provided assistance during the development, implementation, as well as evaluation phase of the learning process. *Examples from facilitators, consistency in facilitating, follow up and feedback from facilitators* were indicators of facilitators who were considered helpful by teachers in assisting the teachers to be able to mix and match their topics with specific culture and or arts in the culture-based teaching strategy.

b. the knowledge construction process (transmission process versus meaning-making process)

The teachers currently teaching are products of long years of education which has been claimed to be more “content and sistem oriented”, instead of students oriented. Thus, teaching by many of them was perceived to be a transmission process of some content to the students, as if students are empty bottles. The transmission process was expected to be delivered following a given curriculum and within a preset system (in which operational aspects are considered more important than the meaning making of the students; including structure and infrastructure, availability of media and tools, physical condition of the school and classrooms, and also budget allocation). This perception has been reported by many teachers, who perceived that *the availability of time, money, facilities, books, other instructional media and materials* were important factors which were hindering the success of implementation of the culture-based teaching strategy.

Within such a framework, learning was perceived merely to be “receiving materials or content from teachers”, therefore, listening and memorizing the information transmitted by teachers were considered the most important activities in learning. Meanwhile, based on constructivism, learning is a meaning making process through a series of interaction of one student with the teachers, with other students, and with him/herself. Questioning and active participating (searching, exploring, analyzing, and concluding) are indicators of the meaning negotiation process. It centers upon students, and starts with the previous cultural experience and knowledge students bring in to the learning process. Culture-based teaching strategy views the students prior cultural experience and knowledge as a springboard to start the meaning negotiation process which lead to meaning making.

The teachers' perception of learning, whether as a meaning making process or a transmission process, is one of the factor hindering the ability of teachers to be able to design a more participative teaching and learning process. In addition, the fact that most teachers do not found relationship between the students' prior cultural experience and knowledge and the subject matter content has also been another factor which resulted in decontextualized learning of subject matter via transmission mode.

Although teachers claimed that they have been trying to shift their emphasis from teacher-centered teaching and learning process to the students-centered one, the observation of the pilot test indicated that teachers' domination was relatively still high. Nevertheless, it was relatively less domination than previous picture where teachers had been the sole source of information and in command throughout the teaching and learning process. The implementation of the culture-based teaching strategy has to a certain degree changed the picture of teaching and learning process, which according to teachers: *students were relatively more active participating in their learning process, working in groups*, and teachers feels that *less work was needed for teachers during the session since the students were working actively*. In addition, *enthusiasm from students to learn the topics in a different way* from the usual sessions had been reported to also be one supporting factor. However, according to some teachers, *curriculum target may not be achieved since the culture-based teaching strategy requires a lot of time for so little topic coverage*. Thus, since teachers were not used to teaching "big picture", instead they were more accustomed to deliver content according to the given curriculum, then teaching a big picture seemed to teach small chunk of topic with a lot of time.

c. the changing school culture (learning environment, learning resources, administrative support)

The implementation of culture-based teaching strategy is calling for changing of school culture. The culture-based strategy will make teachers and students to go around their school – the cultural community where the school resides – to look for learning resources. The nearby fisherman can be an excellent learning resource, a becak driver, a lady dress maker, the local traditional events and ritual, the local flowers, vegetables, and animals are also important learning resources. In addition, the culture-based strategy also asks for active participation of students and teachers in a learning process. Therefore, interaction as a symbol of meaning negotiation process

is highly important. In this case, classroom can not be expected to be quiet and sound, but it will be filled with more students movement, noisy, and probably dirty. Such a situation are sometimes not understood by the school administrators and also parents who translate being discipline as merely to sit quietly and listen to teachers. In addition, facing new learning environment where students are allowed to be assertive with their questions can also be confusing for some teachers. In this case, the teachers' orientation which was mostly one-way teacher transmission and content oriented, that they were bound to follow the "tradition" or the school culture, and also lack of support from administrators are factors which may hinder the implementation of culture based teaching strategy.

The results of the study indicated that during the pilot test, the learning environment has somewhat changed. Many teachers were still leading the students through challenging activities for higher order thinking. However, students were given freedom to express their own opinion, and to have different perspectives based on sound justification. Activities were varied, challenging, mindful, and meaningful both to the topics and to the students. The teachers were ready and prepared with their session. Students' participation was very high. Teachers reported that *students were actively involved in group work, students were anthusiast, have higher motivation to study, and creative*, while *the sessions were lively, fun, noisy, dynamics*. Some students, according to the teachers, reported that *they wanted to have similar sessions for several times, so that learning can be fun*. Nevertheless, sustainability of the implementation of the culture-based teaching strategy has been discouraging. This is due to the fact that administrative supports from the school management has relatively been low. Teachers who wants to repeat their culture-based teaching strategy *were not supported by the availability of materials, books and literature, finance, as well as classroom management system* (which emphasizes on the tidy, quiet, and well-organized classroom). In many cases teachers *have to spend their own pocket money* to be able to implement the strategy.

Although the learning environment has relatively changed, the shift has not been maximal. From the perspective of constructivism, the teachers have tried to put each steps taken and each concept into the context of students' daily life. Authentic tasks and ample of activities were given to allow meaning negotiation process between teachers and students. Contextual use and application of knowledge were

indicated through examples given by the teachers as well as students. However, *not the whole process was shifted, the nuance of the traditional teaching and learning practice* (dominated by teachers transmitting the content) *was still there*.

In terms of assessment and evaluation, multiple representation of understanding was implemented, although at the minimal level, i.e., test, poems, model, chart/posters, students worksheet. Most teachers *still relied on the basic paper and pencil test*. However, some of them have *combined the assessment with quality of group work, results of observation of the process (including active participation from students), and used of question and answers sessions to assess students learning*. The teachers acknowledged that *comprehensive exams was relatively difficult*, especially when they depend solely on the paper and pencil test alone. They realized that they have to *look for more strategies for assessing students learning* at the evaluation phase.

From the perspective of integration of culture and arts, *the lack of knowledge on various culture*, had caused the teachers to simply select culture and arts with which they are familiar. This has provided a rigid framework which could not accommodate the fullest creativity of the teachers. The tradition of teaching and learning process indicates that learning should take place in a classroom from all learning resources available in the classroom. Bound to such a tradition, teachers had not make use of the available local learning resources up to the maximal point. The teachers *had not invite distinguished local community member*.

Moreover, although teachers had reported that their “*well-prepared*” *lesson plans* have been one success factor to the implementation of the culture-based teaching strategy, many teachers were not comfortable with “*lesson planning*”. First, the teachers reported of *not having enough knowledge as well as skills on lesson planning* (it was done nationally previously). Second, *lesson planning was not considered the first step of their teaching ritual at school* (it used to be done nationally, teachers did not need to bother anymore). Third, cultural-based teaching strategy *required a very detail and systematic lesson plan thus required extra work (time, resources, and thinking), and considerably tedious*, according to teachers.

The overall picture of the pilot test was considered *fun, motivating, dynamic, and personally satisfying* according to teachers. The teachers put emphasis on their personal satisfaction due to the fact that *they learn new things, i.e., variation in teaching or new strategy, they have experienced the pilot test and they feel successful*.

and they were challenged to be more creative in the future (which they were certain that they can do it). The teachers also reported that the pilot test had provided them with experience to know more about many different culture, to teach with various learning media and strategy, to be a good facilitators for students (instead of to be the authority of the classroom), and it seemed to be less work when students were actively involved in the learning process. One teacher said: I intend to grow professionally, therefore I participated in this pilot test, and it has been innovative, and also satisfying to be able to do it and to be able to motivate students to be active in the session.

REMARKS

The study showed that there are three main factors to be taken care of for future successful implementation of the culture-based teaching strategy as one powerful alternative that connects the schools with the rich local learning resources, i.e., the content selection and integration (including knowledge on the subject matter as well as on the local culture, and creativity to mix and match the content and the local culture), the knowledge construction process (transmission process versus meaning-making process), and the changing school culture (learning environment, learning resources, administrative support).

In regard to the content selection and integration, much effort should be done in order to upgrade the teachers's mastery upon subject matters and also various different culture in Indonesia. In addition, exercises and a number of practices in mixing and matching the content with the culture or arts are also needed to further developed the teachers creativity in lesson planning. The idea for teachers to open their mind and to try to write lesson plan with the assistance of students – who are eager to starts new things and to learn in a different way, can be suggested to teachers. Concerning the knowledge construction process, much efforts should be taken in order to shape the teachers mind and perception with the new paradigm of constructivism – which beliefs that learning is a meaning making process, instead of a transmission process of a bulk of content. Changing perception may not be easy, however, steps need to be taken, i.e., providing more information about constructivism via provision of literature (books, articles, etc.), training, and or mentoring. Emphasis on the availability of media, tools, materials, and learning resources as hindering factors to culture-based teaching must be eliminated.

Therefore teachers are expected to be open mind, analytical, and creative in making use of the media, tools, materials, and learning resources which are available locally (or they make available locally). Further, it is recommended that teachers and also schools are trained and prepared for the changes following the adoption of the culture-based teaching. The process of designing learning experience in lesson planning activity should become an essential part of the teachers' instructional ritual at schools. Therefore, further efforts in familiarizing teachers with a design process must be taken to enable the teachers to gain deeper understanding of their subject matter content, the local culture related to their topics. It is also recommended that the design process takes the team approach, so that each member of the team can assist one another in different aspects, especially in reducing the prejudices and also making oneself comfortable with the equity issue of their teaching. In addition, a new culture of instruction must also be fostered in order to enable the teachers to be creative, instead of just following the tradition

Although the pilot test had been considered personally satisfying and relatively fun and motivating, this had only been the first initiative. Despite its weak points that need to be improved, this strategy has indicated its potential to contextualized the teaching and learning process in school to the the given cultural community through integrating local culture and arts as instructional media, learning framework, and also application framework of learning. It is still a long way to go and much efforts are needed for the teachers to fully adopt the idea of the culture-based teaching strategy, to implement it, and to become accustomed to the idea.

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